

I 1934

1934-I

Lakeside Lab. 6/22

Prairie west, etc

Water-levels, etc.

Shore plants - high water level

Lakeside Lab. 7/31-

Note Book

No. 188

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79

//

B. Shimek
Iowa City, Iowa, 529 Brown
Cor. Lubside Lab.)

1.56,

Expenses

June 21 Iowa City - Gas	1.50	oil	1.00	\$ 2.50 +
June 22 Ames. - gas, - meal 35				1.56 +
Midford gas & oil				1.86
Board - 1 week - for two				9.00
Dinner (reunion)				1.50
June 29 - Board for two				9.00
July 8 - " " " 2 days				2.50
Jewell - gas & oil	1.67 + .27			1.94
State Center meal				.51

\$ 2.50
1.91
1.86
<hr/> \$ 6.27

one way, 1 small meal

June 22-1934 - Friday.

Left Iowa City at 5:45 am.

We drove to Marengo, cut across to Belle Plaine, and followed # 30 to Ames.

We travelled through a good steady rain for 50 miles from Iowa City.

We reached Ames (Agric. Bldg) at 9:10 am, and I went to Prof. Macdonald's office.

He took me to Dean Kildee's office, where I also met Mr. L. A. Schreeman, the Federal Agent looking up marginal lands. I had a nice 1/2 hour's visit with him and set out the advantages of the Little Sioux area.

Worthy prairie, but with other areas (hairy logs, woods, etc.)

Also easy administration became
laboratory had Centurian and
worked with both State Board.

He has his head quarters at
Urbana, Ill., where he was
called for the next day,
but promised to come up early
in July.

We then drove north on
#15 and stopped at Little Wolf
Lake. This is without water,
excepting a very little on
E. side.

For several miles N. of Ames
trees have been planted
irregularly, or in ^{small} clumps
along the road.

The region was very dry
until we reached Pile Alto
Co. From there to the lake
it was fresher, green, and water

appeared in ponds, etc. A very
hot day.

We rested at the Milford
Park and reached the Laboratory
at about 5:10 pm.

Met Dr. Wolf & wife,
^{Dr. & Mrs. Anderson}
Dr. Jacques, Rose, Carter, etc.
Mr. & Mrs. Remley (one Dr. name)
etc. We located in the

guest room of the cottage.

What prairie we saw
looked green but sickly, -
few bright colors.

In evening called on Dr. F. J.
Smith, and arranged to go
to Little Sioux tract Monday
morning.

June 23, 1934 - Sat.

Spent the day in arranging my papers and plats, and Margie helped me make measurements of buildings for plat on original Laboratory tract. She latter in the morning, and I platted them in afternoon.

June 24, 1934 Sun.

Worked on notes and plats. In afternoon we drove to Ann Upham (Margie's cousin) at Hayward's Bay. Found her and had a short visit.

June 25, 1934 - Mon.

My brother-in-law, Dr. F. J. Smith, Dr. Wolf, Dr. Anderson and I drove to the Little Ferry tract. We first examined the upper part of the tract, driving across and around north end, then going S. to sunken bottle hole, hanging logs, spring creek, etc., and I selected parts suitable for preserve.

All were greatly impressed with the area. We noted poor soil in cuts, etc., and much underbrush land.

(See plat).

We then drove across S. end to Milford, and to Lab.

In afternoon I platted the area, making copies for Dr. Wolf.

Dr. Anderson, Dr. Smith, Mr.
Schweneman, etc. (some ⁱⁿ next 2
days)

In evening at table the folks
chanter a birthday greeting

June 26, Tues. (1934)
Spent day in making plates

June 27, 1934 - Wednesday
Worked on notes and plates.

Received telegram from
President Jensen that Board
of Education Committee would
visit us Friday, & asking that I
telegraph Chairman Judge
Carlson.

Worked on notes for this
meeting with Committee, and
in early afternoon went to
Milford & sent telegram
to Judge Carlson.

A hot day

June 28, 1934 Thursday

Worked on plates and on notes for meeting with Committee.

A hot day.

June 29, 1934, Friday.

In the morning I worked on plates and on notes for committee meeting - until 3 PM.

At 3 PM, the committee (Judge Carlson, Mr. Shull and Mr. Keenan) arrived and we had an interesting session. Dr. F. J. Smith, Dr. Wolf and I met with the committee.

They stated the two bears - that Lab. would be a Grand,

and that cost would be great. I took up both points (re letter to Dr. Bodine) and Dr. Wolf also explained how cost & maintenance.

We all had the impression that the Board was well impressed. We took them over the grounds and the property, showing its extent and usefulness for our purpose. Judge Carlson stated that it might be well for us to be on hand at the Aug. meeting July 10, if they concluded to report.

June 30, 1934 Sat.

Made additional measurement
for plat with McTimber
Worked on plants

July 1, 1934 - Sun.

Worked on plants. In the
afternoon ^{we} drove to Margie's
cousin, Ann Upham at Haywards
Bay. We had a short visit
and returned via Arnold's
Park and Milford.

July 2, 1934 - Mon.

In the forenoon I went
out with Supt. Thorsen
of the C.C.C. camp to get
high water line and also
to view park.

We worked on beach both
north and west of Gull Point.
Thorsen took levels (with
Flickinger)

On N. side we took elevation
Sta. 1. On bank (base) above sand
& some boulders. 46 in. ^{above lake} (= 106.0) <sup>Arnold's Park
gauge</sup>

Sta. 2. Upper line of boulders. 57 in.
above lake, ^{gauge} (= 106.9)

Sta. 3. Upper line of beach plants
49 in. above lake (= 106.2)
^{S. side Gull Pt.}

Sta. 4. Top of higher ice-shore ^{sand} ridge
67 in. above lake (= 107.7)

Sta. 5. Top of lower ice-shore sand-
ridge, 50 in. above lake (= 106.3)

Sta. 6. Top of boulder 48 in.

above lake (≈ 106.2)

Sta. 7. Top of ice-shore boulder
ridge, 42 in. (≈ 105.7)

Sta. 8. Top of ice-shore boulder ridge
53 in. above lake (≈ 106.7).

Sta. 9. Top of ice-shore boulder
further west, 49 in. (≈ 106.3)

Average = 106.4.

Reading at Arnold's Park
quartz that day (by Mrs.
Thorsen) ≈ 102.15 .

Last year, in Zenace Park
beach work, the Arnold's Park
quartz read 103.08.

My estimate last year 3.5 ft

I also took notes on the
beach plants and then lost
them, so Margie and I drove

out & I went over same
ground Wed., July 4. (see notes
for that day).

In the afternoon I
worked on notes and plates.

July 3, 1934 Tuesday,

In forenoon (worked on notes
and plates, and at 1:30 we
drove to White's cottage just
E. of Crescent Beach Hotel,
where Board of Conservation
was meeting.

I presented the need of the
purchase of the high point, and
also reported on the Gull Point
high water level.

Worked on notes, etc., and in
evening we drove to Milford
and on return were caught in
a terrific rain (+thunder) storm,

July 4, 1934

Worked on notes and plates
Examined in morning. In
afternoon The Fish & Game
Comm. people (Dr. Boone, Mr. Rosen,
Dr. Poole, Mr. Bauer (of Orleans),
Mr. Gooders & their ladies
(+ the secretary) called and
the Lab. and we visited
with them.

We then drove to Cousin
Annie's for a short visit, hoping
to find Sally Allen (failed)
and returned to Lab.

July 5, 1934, Thurs.

In the morning Mr. Thorne
took another reading on
ice-thin boulders above
dock, showing 46 in. above tide.
He + Mr. Sylvester (or ^{Thorne} ~~Thorne~~)
and I then drove to Sully
Park, and Mr. Sylvester
and I went over the south
(or preserve) part and I

suggested consolidation of
refuge + pushing nature
trails outward, with only
one dip-in west and east.

Also small parking area
at Crescent Beach end was
suggested by Mr. Sylvester.

Men brought snake, taken
among boulders. (See spec.)

Drove back to Lab.
The Park has area of 72 acres.

In the afternoon Marie
and I drove to Gull Pt.
and I took another list
of beach plants.

N. of Gull Pt. I observed

Ribes floridum fr.
Amorpha fruticosa fl. fr.
Asclepias incarnata fl.
Paederia gnymptha lf.
Polanisia trachysperma fl. +
Green Ash (seedling)
Columbus " "
Xanthium lf.

Polygonum convolvulus

Potentilla (see spec)

Salix amygdaloides (large at edge)
" *longifolia*

Acerida lf.

Polygonum (dark spot on lf)

Hordeum jubatum

Artemisia caudata very com.

Eriogonum canadense lf.

Ulmus americanus (seedling)

Fraxinus pennsylvanica old fl.

Chenopodium album

Lepidium apetalum fl. fr.

Zaraxos officinale fr.

" *erythraeum* fr.

Urtica gracilis com.

Asclepias syriaca lf. few

Lycopus americanus

Oxybaphus myrtaginus

Salix hali var. com.

Lactuca scariola var.

Melilotus alba - fl. few

Ambrosia psilostachya lf.

S. side of Gull Pt.

Polanisia trachysperma

Salix longifolia

Amorpha fruticosa

Xanthium

Chenopodium album

Polygonum lapathifolium

" *pennsylvanicum*

Convolvulus sepium fl.

apocynum cannabinum var.
ambrosia artemisiifolia L.
Senecioium canadense, fl.
Hordeum jubatum fl.
Salix bali var.

Achillea

Polygonum convolvulus

On upper part of sand point:

Sporobolus cryptandrus

Pentstemon grandiflorus

Artemisia canadensis (very com.)

Cyperus Schweinitzii

Carex (one spec.)

etc.

In afternoon I caught larger snapper
12 1/2 x 18 in., weight 32 lbs.
In the evening we drove
to Woodcock's cottage at
Zerace Park and I reported
on Gull Pt. Park.

Woodcock informed me that
the Board visited "high point",
but objected to price and
to buildings.

We discussed better
presentation of matter.

On return we were
caught in another
down-pour.

July 6, 1934, Fri.

In forenoon I made plants of
our tract.

In afternoon Dr. Wolf, Dr.
Anderson and I outline part
of lawn, etc., to be cut, &
Dr. Anderson and I went
over our prairie area.
Found pheasant's nest with
7 eggs.

A cold day.

There had been rains here recently and things look fairly well, but the effect of the dry winter & spring are notable.

The prairie is coming back on our north 60 acres, and especially on the ridges.

I notice following:

Bouteloua curtipendula fl.
" *oligostachya* fl.
Cirsium canescens - 1 in fl., new.
Petalostemon purpureum fl.
Prunella circulata dr. R. bar

July 7, 1934 Sat

I worked on the flats. Then in the forenoon, and in the latter part of the afternoon I worked on the Floate prairie, north of the road, while Margie drove to Milford.

I collected plants and notes also the following: (List not complete)

July 7, 1934

Flora native prairie (south)

Eryngium yuccifolius fl. - scat.
Brunneria angustifolia fl. scat.
Petalostem candida fl. scat.
" *perfolium* fl. more common
Eriogonum ramosum fl. (small white)
Amorpha canescens fl. - common
Asclepias tuberosa fl. (lower slope) few
Coreopsis palmata fl. scat.
Stipa spartea (mostly white) small - very com.
Silphium laciniatum fl. scat.
Lithospermum angustifolium lf. few

July 8, 1934 - Sunday

In the morning we did some packing and then Dr. Wolf and I drove to the Hanging bog B. of west end of Silver Lake.

The upper part of the bog had been dry earlier in the season and *Lymnaea caerulea* was restricted only to lowest part. The small *Utricularia* was also scant.

Very few plants were in flower, but I collected following (see list):

Berula americana

Viola fr.

Liparis Loeselii - fr. (saw 3 or 4 sp.)

I also collected *Glycerhys*
lepidota on the lower prairie
where we stopped car.

It was mostly in flower (prime)
but a few had green fruit.

We walked over quite a
bit of the bog, but there was
little color.

The violets were in the
uppermost part of the bog on
the wetter part between &
around the little pools.

The bog was disappointing
partly because it was
early and partly because of
the early very dry spring
season. There was very
little color, as few plants
were in bloom. The bog
was evidently improving, as

there had been rains, but
it was not as fine as last
year.

We returned to the
Calumet and packed
for our homeward
trip.

We left at 1:45 P.M.
It was raining a little,
but we soon passed
through it, and while rain
threatened all the way, we
had none, though we
evidently followed a storm
(or storms) as the pavements
were wet in many places
before we reached Ames.

Beyond Ames the
conditions were much drier,
and there was less recovery.

in crops. We returned
via Miller Plains and
Marengo, and reached
home at about 10 PM.
We had stopped for
supper at State Center.

After returning from
the hanging log
Marengo and I went
over the Flote tract
just south of the Lab. barn.
This was once cultivated,
and then pastured or cut
for hay, but it is
coming back. I noted
plants as listed on next page,
& collected some.

On Flote tract near barn S.
of barn.

Oxybaphus myrsinifolius fl. xv.
Verbena stricta fl. frequent
Erigeron annuus fl. 2-3. com.
Zizia aurea fl. frequent
" hybridum fl. frequent.
Potentilla canadensis fl. frequent
Aster multiflorus fl. not rare clump
Rudbeckia hirta var. var. com.
Physalis heterophylla fl. very com.
Vaccinium — ? fr. ~~clump~~ ^{several}
Phlox pilularis com.
Aster multiflorus fl. com.
Asclepias syriaca fl. var.
Rosa pratincola fl. very com.
Asperula tomentosa fl. com.
Lupinus perennis fl. few clumps
Conoclinium coelestinum fl. com.
Cirsium arvense fl. patch
Cirsium discolor fl. few
Medicago sativa fl. clump
Urtica dioica fl. clump

Zinnia *officinalis* fl. fr. com.
" erythrina fr. 2 clump
acutata *veronica* fl. 1.
San *prostrata* fl. fr. com.
Solidago *rigida* fl. 1 clump.
Lactuca *ludoviciana* fr. 3 clump.
Astragalus *canadensis* fl. few clump.
Petalostemum *puberulum* fl. clump.
" canadensis fl. few clump.
Andropogon *furcata* fl. few clump.
Helianthus *grossus* fl. near base.
" tuberosus fl. " "
Vitis *vulpina* fl. fr. "
Galium *bracteatum* fl. large clump.
Oxalis fl. com.
Euphorbia *maculata* fl. 1.
Cirsium *canadense* fl. com.
Asclepias *tuberosa* fl. 2.
Helianthus *scaberrimus* fl. quite com.
Astragalus *officinalis* fl. few.
Phoradendron *virginicum* fr. com.

Last 2 m. 1 *Euphorbia* *maculata*
 both very com.

Brauneria *angustifolia* fl. few.
Burdock fl. few.
Panicum *virgatum* fr. clump.
Asclepias *lanceolata* fl. few.
Symphoricarpos *occidentalis* fl. 1.
Asclepias *reticulata* fl. - patch.
 50 *Asclepias* *perfoliata* fl. (1 fl. only)
Antennaria *ludoviciana* fl. 2 patches.
Ceanothus *americanus* fl. few.
Lathyrus *venosus* fl. patch.
Veronica *canadensis* fl. large clump.
Thalictrum *dasycarpum* fr. 1.
Agropyron *tenax* fl. few.
Origanum *virgatum* fl. 1 fl.
Agropyron *Pachystachya* fl. com.
Rhus *glabra* fl. at 1st patch.
 60 *Lithospermum* *canadense* fl. small patch.
Asclepias *viridiflora* fl. 1.
Solidago *reticulata* fl. 1.

Left at 1:45 P.M. at 24457

6.7 to creek (outlet of lake)

Lab. gate	0	Iowa River	99.1 1/2
Turn east	0.4 1/2	New road	99.8
" south	.7	Garners	100.3
" east	2.7	(new road)	100.10
" S. to Melford	4.1 1/2	Stemmer road	107.3
Melford (amptn)	5.3 1/2	Iowa River	107.8 1/2
" RR	5.6 1/2	Kodell	113.0
Turn W. - Co. line	10.4	Co. line (Wright)	114.1
" S - " "	10.8	Iowa river	117.3 1/2
Factoria road	11.7 1/2	" "	117.6 1/2
#18	15.5	Belmond	118.3 1/2
Spencer RR	18.4	Iowa river	120.1
(71+18) - turn E.	19.6	" "	124.7
Dickens road	25.6	E. W. W. Rd Solberg	125.6 1/2
Co. line (Palo Alto)	31.1	Line #10	126.9
Ruthven	31.8 1/2	(Salt) RR	128.6
#17	38.8 1/2	(Strongest S.)	
Des Moines riv. (new)	41.4	Co. line (Hamall)	138.8
" " (old)	41.5	Blairburg RR	143.9
Emmit Bay - #17	43.6	Jewell	155.6 1/2
" RR	43.8	Little Lake Lake	158.7
Cylinder	51.6	Co. line (Story)	163.3 1/2
Co. line (Kosuth)	57.1	Story City road	164.8
Whittenow road	58.0	RR	166.3
Algona (west)	67.3	Ames #15 #30	176.1
Des Moines Riv.	67.6	Boone river	177.3
Algona (east)	68.3	Marion	184.6
Sexton	74.6	RR - Curd	187.7
Wesley	79.5	Co. line	191.5
Co. line (Hancock)	81.2	Co. line (Marshall)	195.8
Hutchins	85.9	State Center	199.1
Britt	90.0	(turn) at 6:29 PM	
Engle Lake road	93.1	starts at 7:05 AM	
Duncan	94.7 1/2		

38
45
40
123

1st km - 38 mi.
2nd 83" - 45
3rd 123" - 40
4th 161" - 38

Silphium laciniatum common
 E. of Oglin, Pals, at G.
 All small plants, - as elsewhere,
 also many between Section V
 Wesley in Kossuth Co. - all
 rather small.

Also similar lot east of
 Hutchinson, Ham. Co.

Verbena stricta very abundant in
 pastures beyond Britt, - all way.

All looks fresh & green to and
 beyond Garner,
 dead evergreen all along the
 line.

No water visible in Little
 Wall Lake.

Things looked green toward
 Ames, but greener than
 before. Toward Marshalltown
 pastures still quite yellowish.

State Census 199.8		Lost about 15 mi. (added)
(Con.)	(Town)	
Bryce over RR	209.5	
Marshalltown (RR)	214.3	Marango #6. 268.3
Le Grand {	222.5	So. Anna 274. ?
Co. line 225.5	222.8	C. M. S. P. Ry. 277.1 -
Montrose -	228.1 -	Homerland #49 278.8 1/2
Jownd, 232.3		RR 279.3 1/2
Zama {	235.4 1/2	Co. line 281.1
	236.6	Oxbow { 284.2 1/2
Chelsea road	246.1	{ 285.7
#30 + {	246.2	Ziffin - 291.0 1/2
Belle Plaine #73	252.8 1/2	Comible - 296.7 1/2
Iowa river	255.4	Home - 299.8
		RR, Iowa 233.7 -
		#70 235.2 1/2
		Shadown 239.8
		C. line Bark 251.6

Arrived at 9:59 + 5.

299.8
 235.4 1/2
 64.3 1/2

79.8
 64.3 1/2
 15

Aug 18 Iowa City ¹⁵⁰ oil 1.00 2.50
Melfon gas 1.24

July 31, 1934, Tuesday - Okoboji
We left home at 5:33 AM.
The morning was cool and pleasant.
Paul & Bertha (with Dorothy) left
just before us for their home trip.
We drove via #161, #218 and
#18 as far as Ruthven.

I tried a little unsuccessful
bridging just beyond Cedar Falls.

The unbroken pasture prairie
N. of Cedar Falls had much
Verbena stricta, - other prairie
plants evidently having been sheltered
by stock. The Verbena not eaten.

I stopped at Buffalo Slough,
at Mason City, but it was
dry as a chip. Stock was
feeding over it, and the pool
south of road at the road fork
was a hayfield, just cut over.

I tried dredging in the Iowa River (here a small creek) west of Garner, but stock tramped in it too much. There were several carved-in burrows of muskrats in the bank.

W. of Emmetsburg a farm on N. side of road showed much better small grain east of grove at house than west of it.

This was notable in many other places along the route, East of Clear Lake (& elsewhere). The trees on W. side of groves suffered much more. Scotch Pine, Arbor Vitae & some Spruces were dead all along.

Many other trees all along the line on the prairies showed dead tops & many dead

individuals. Some of this is not this year's effect.

Fields exposed fully to west are quite wintering poorer (in crops).

We took the county road cut-off beyond Ruthven to Lost Lake Lake.

The west side of the lake is entirely dry and there are wide beaches along the larger part east, — very low. I collected a small *Cyprinus* on the sandy beach.

We stopped at Mud Lake after driving east between the lakes. There is some water visible. Yellow headed Blackbirds were very plentiful & I could hear water birds. I collected

2 *Utricularia* plants in flower
at edge of Mud Lake.

Around the road, W., were several
clumps of very fine *Verbena*
stricta among the common form.

We drove by Green Slough (in
Clay Co.) and it shows water
in several places above the
road. Could see none below road.

The fields and pastures
along the entire route
looked fresher & greener
than on previous trip.

We reached the Calumet
after 4 PM. and put up
in the "guest-room" of the cottage.

In the evening I talked
mails with Dr. Wolfe. I
brought up 72 tubes with
shells.

Aug. 1, 1934 - Wednesday
Spent forenoon in writing notes &
arranging papers, etc.

We first drove to Dr. Smith's,
Vestergaard's and Myerly's (at
Manhattan) to ask about cottage.
Price at Vestergaard's \$25.00 per week
at Myerly's \$12.50 to \$22.50, &
at Babcock's (at Manhattan) \$18 to \$35
per week. In all cases all is
furnished except the linen.

In early afternoon I wrote
notes. Then we drove to Milford
for formalin & rubber cement.

In the evening I went to
the Fjorte prairie N. of
road.

See plants on following
pages.

astragalus campestris L. var.
Panicum *Laetevirens* Ellg. var.
Euphorbia verticillata L.
Verbascum virgatum L. L. 496.

Sax. medium a tall spec.
Dolerite from amygdalitic
water bearing Ep. &
Sodium carbonate, peate
like water containing as com-

Andropogon furcata low fl.
Cimicifuga racemosa ab. fl.
Silene alba fl. low
M. alba fl. pale

Andropogon furcata Sw. fl.
Cimicifuga racemata Michx.
Pilularia scutellaria fl. pur.
Monarda didyma fl. red.

1

1

In lower part - with Silphium perfoliatum
 & Andropogon furcatus
 Rosa pratincola? fl.
 Verbena stricta fl.
 Glycyrrhiza canadensis fl.
 Ambrosia trifida fl.
 Asclepias tuberosa fl.
 Artemisia dracunculoides fl.
 Agropyron Smithii fr.
 Eragrostis yuccifolia
 Melilotus alba fl.
 Cirsium discolor fl.
 Eragrostis yuccifolia fr.
 Paspalum distachyon
 Melilotus virginica fl.
 Solidago rigida fl.
 Boutelou curtipendula
 Coreopsis palmata fl.
 Ambrosia artemisiifolia fl.
 Artemisia ludoviciana fl.
 Crocus angustifolius fl.
 Allium stellatum fr.
 Petalostemon carolinianus fl.
 Lepachys pumila fl.
 Liatris scariosa fr.
 Stipa spartea old good patches
 Petalostemon purpureus fl.
 Reichenbachia amurensis - fl.

Apocynum cannabinum fl.
Rhus Toxicaria fl.
Aster multiflorus fl.
Panicum virgatum fl.
Monarda mollis fl. ab fl.
Helianthus scaberrimus fl. (few)
Pastinaca sativa fr. (few)
Solidago canadensis fl. towards
Helianthus gro.
Onoclea muricata fr. fl.
Astragalus canadensis fl.
Andropogon scoparius fl. (few)
Taraxacum fl.
Aster laevis fl. (few)
Lactuca ludoviciana fr. 1

In no place are there abundant
 (except species named), but small
 patches + scattered specimens occur

Lower down *Helianthus* grounds
 is com. & still lower, *Paspalum*
stolonatum - fr. fl.

The Monticton cuthead as
 down a most of upward slope to
 west, to top

On upper part of main tract westward
Artemisia canadensis fl. few
Liatris punctata fl. ^{frequent} fl.
Desmodium illinoense fr. small patches
 " *curtipendula* fr. scat
Branium angustifolium fl. scat
Stipa spartea fl. fl. frequent
Eriogonum racemosum fl. scat. frequent
Hordeum jubatum fr. few (disturbed spots)
Rosa pratincola fr.
Petalostemon purpureus fl. scat.
Aristida (*Muhlenbergia*) clumps
Monarda mollis fl. not com
Agropyron Reichenowii fl. scat
Solidago nemoralis fl. scat
Aster multiflorus fl. scat.
Carex sp. *halimifolia* - few late fl.
Anemone patens var. fl. scat
Petalostemon candidus fl. scat frequent
Agrostis hyemalis fr. - few
Castilleja septentrionalis fl. sev.
Helianthus scaberrimus fl. fl. fl. fl.
Solidago nemoralis scat. fl. fl. fl.
 " *viridis* fl. scat
 " *missouriensis* fl. sev.
Liatris scariosa fl. - scat
Lernum pulchellum fr. few
Desmodium illinoense fl. few
Agropyron Reichenowii fr. scat

Oenothera serrulata fl. very
Lygodesmia juncea fl. few
Oenothera biennis fl. few
Equisetum hyemale 2 water
Lepachys abrotanifolia fr. (disturb)
Andropogon furcata fl. ("")
Hardenbergia juliflora fr. ("")
Kuhnia & *complanata* but sev.
Allium acuminatum fl. few.
Amorpha canescens fl. few
Eriogonum canadense fl. (disturb)
Ceanothus am. fl. (a little tree)
Polypogon monspeliensis fl. (disturb)
Andropogon furcata fl. ("")
Lepachys biennis fl. few
Silphium laciniatum fl. few
Eryngium yuccifolium fl. few
Cynopsis palmata fl. few
Helopsis scabra fl. few
Arenaria montana fr.
Solidago missouriensis fl. few
Melilotus officinalis fl. 1 (disturb)
 " *alba* fl. 1
Andropogon furcata fl. few
Linum sulcatum fr. few
Solidago speciosa small tree along
Elymus canadensis fl. few
Vitis vulpina (near house) fl.

Coming in March found a
 young mink which had been
 killed by a car. We took it in.
 This is Lutreola vison leucifera ^{Hollis.}
 which extends from N. Wis. and
 Minnesota to N. Ill. & Kansas.
 (This must be Putorius vison Gapp)

Spent evening in writing
 notes and listing plants

Hemichena lispida fl. few
Physalis virginica fl. few
 " *heterophylla* fl. few also some
Poa compressa fr. scat.
Comandra fl. scat.
Silphium laciniatum fl. few
Prunella americana fl. few
Euphorbia corollata fl. few scat.
Aster ptarmicoides fl. few
 " *sericeus* fl. scat.
Eriogonum canadense fl. 1 (disturb)
Aster laevis fl. few
Astragalus caryocarpus fl. few
Ranunculus abortivus fl. few
Silene stellata fl. few (1)
Ceanothus am. fr. well up.
Quercus coccinea fr. few
Liatris scariosa fl. few
Solidago missouriensis fl. scat.
Lactuca scariola fl. few

Prunella angustifolia fl. few
Chenopodium album fl. (disturb)
Hardenbergia juliflora fl. few
Eriogonum canadense fl. few
Andropogon furcata fl. few
Silphium laciniatum fl. few

11 *Platanus var. cf.*

62 *camptocarpus*

Baptisia bracteata
Bontelona curtispiculata com
" *hirsuta* new
" *oligostachya* fr.
Brunneria angustifolia fr.
Cacalia tuberosa
Carex festuacea
" *stenophylla*
Castilleja sessiliflora fr.
Ceanothus americanus fr.
Cirsium canescens
" *discolor*
" *ionense* few
Comandra fr.
Convolvulus alpinus fr.
Coreopsis palmata fr.
Delphinium Penardi
Desmodium canadense fr.
Elymus canadensis fr.
Equisetum laevigatum com

Erigeron canadensis fr.
" *ramosus* fr.
Eryngium yuccifolium fr.
Euphorbia cordata
" *maculata*
" *Purshii*
" *serpyllifolium* l. fl.
Fragaria virginiana
Galium boreale fr.
Gentiana puberula
Gerardia aspera
Glycyrrhiza lepidota
Grindelia squarrosa
Hedeoma hispida
Helianthemum
Helianthus grosseserratus fr.
" *Maximiliani*
" *scaberrimus* fr.
Heliopsis scabra fr.
Heuchera hispida fr.
Hieracium canadense

Hordeum jubatum ^{sc.}
Hypoxis hirsuta ^{fr.}
Ira xanthifolia
Koeleria cristata
Kuhnia eupatorioides ^{sc.}
" " *corymbosa* ^{sc.}
Lactuca canadensis
" *Ludoviciana* ^{fr.}
Lappula Redowiana "
Lathyrus venosus ^{sc.}
Lepachys pinnata ^{fr.}
Lepidium apetalum ^{sc.}
Lespedeza capitata
" *leptostachya*
Liatris punctata ^{com.}
" *pycnostachya* ^{fr.}
" *scariosa* ^{sc.}
Linum sulcatum ^{fr.}
Lithospermum angustifolium ^{sc.}
" *canescens* ^{fr.}

Melilotus alba ^{sc.}
" *officinale* ^{fr.}
Lobelia spicata
Lygodesmia juncea ^{sc.}
Monarda mollis ^{sc.}
Muhlenbergia racemosa
Oenothera muricata ^{sc.}
" *serotina* ^{fr.}
Onosmodium occidentale
Oxalis stricta
" *violacea*
Oxybaphus hirsutus
" *myrtagineus*
Oxytropis Lamberti
Panicum capillare
" *Leibergeri* ^{sc.}
" *Scribnerianum*
Pastinaca virgata ^{sc.}
Pedicularis canadensis ^{fr.}
Petalostemum candidum ^{sc.}
" *purpureum* ^{sc.}
Phlox pilosa ^{fr.}

Physalis heterophylla ^{few}
" virginiana ^{few}
Poa compressa ^{few}
" pratensis ^{occ.}
Polygala verticillata
Polygonum Convolveris ^{few}
" pennsylvanicum ^{fl.}
" ramosissimum
Potentilla arguta
" canadensis
" monspeliensis
Prenanthes aspera
" racemosa
Proralea argophylla ^{sev.}
" esculenta ^{fl.}
Pycnanthemum flexuosum
Ranunculus reptantulus
Rhus glabra
" Toxicodendron ^{few}
Rosa pratincola ^{fl.}

Rumex altissimus
Salix humilis
Salsola kali ^{var.}
Scrophularia leporella
Scutellaria parvula ^{sev.}
Setaria viridis ^{fl.}
Silene antirrhina
" stellata ^{few}
Silphium laciniatum ^{fl.}
" perfoliatum ^{com.}
Sisymbrium caucasicum
Sisyrinchium caespitum
Solanum rostratum
Solidago canadensis ^{few}
" graminifolia ^{fl.}
" missouriensis ^{sev.}
" nemoralis ^{fl.}
" rigida ^{sev.}
" speciosa angustata ^{fl.}
Stipa spartea ^{com.}

Symphoricarpos occidentalis

Tenckera canadense

Thalictrum dasycarpum ^{scab} fl.

Tradescantia

Trifolium repens

"
Verbena hastata

" *stricta* ^{few fl.}

Vernonia

Veronica virginica

Vicia americana

Viola pedatifida

Vitis vulpina ^{few fl.}

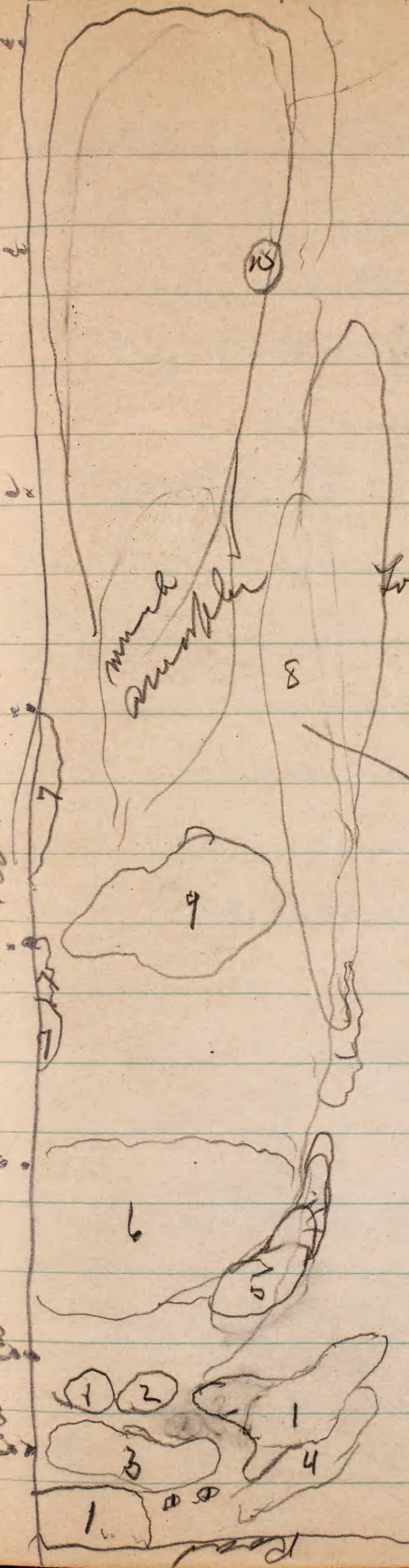
Gizia aurea

" *caudata*

Bygones chloranthus

Road to Lab

- 1 - *Silphium perfoliatum*
- 2 - *Andropogon furcata*
- 3 - *Stipa sp.*
- 4 - *Helianthus grosseserratus*
- 5 - *Sagittaria arifolia*
- 6 - *Prunella caroliniana*
- 7 - *Helianthus scaberrimus*
- 8 - *Petalostemum candidum*
- 9 - *Amorpha canescens*
- 10 - *Liatris scariosa*



mud water
Pet. caroliniana

Smucke

The upper (S) part of the Flats prairie
is well carpeted with grass, mostly
Bouteloua curtipendula & *Aster sp.*, but
the most conspicuous plant is *Ammophila*
canadensis, all over the area.

This & the ^{solidago} *Petalostemon*,
Coreopsis, *Rudbeckia*, etc. rise above
the grass, & the *Aster* will join them.

On the flatter, lower prairie to the
N. *Ammophila* about disappears &
Petalostemon canadensis is very common.
The plants are more vigorous, & the
following are striking

Petalostemon canadensis fl. very com
Asclepias speciosa fl. com.
Rudbeckia sp. com.
Erigeron annuus fl. very com. & large
Thalictrum dasycarpum fl. fl. com.
Parthenium integrum fl. com.
Lysichiton cuneatus fl. (much more frequent)
Erigeron philadelphicus fl. large
Veronica virginica fl. fl. com.
Andropogon furcatus fl. larger & more frequent
Salix humilis fl. more com.

Silphium laciniatum fl. few - large
Solidago nemoralis fl. com. large
Viola pyramidalis fl. fl. com.
Sium canadense fl. frequent
Prunella angustifolia fl. com.
Pedicularis canadensis fl. com.
Antennaria dioica fl. com.
Phlox pilularis fl. frequent
Glycyrrhiza lepidota fl. com.
Lactuca ludoviciana fl. few.
Asclepias tuberosa fl. fl. (long draw)
Aquilegia canadensis fl. frequent
Agrostis alba fl. frequent
Helianthus scaberrimus fl. com.
Petalostemon purpureus fl. com.
Stellaria media fl. com.
Solidago virgaurea fl. com.
Astragalus canadensis fl. few.
Solidago nemoralis fl. few.
Andropogon furcatus fl. com. low down
Solidago rigida fl. few.
Ceanothus am. fl. fl. com.
Liatris scariosa fl. few
Bouteloua curtipendula fl. fl. com.
Prunella angustifolia fl. few.
Cirsium discolor fl. com.
Asclepias tuberosa fl. fl. com.
Helianthus annuus fl. com. further E.
Alnus incana fl. few
Veronica virginica fl. few - lower
Rhus typhina fl. com.

Asclepias speciosa fl. fl. com.
Helianthus scaberrimus fl. fl. com.

Scutellaria peruviana fl. fl. com.
Phlox pilularis fl. fl. com.

The lower part (not used) is
dominated largely by *Andropogon*
furcatus.
Lupinus & *Helianthus* are conspicuous
in the lower part, - lower depression

Aug. 2, 1934 - Thurs.

I worked on the lower part of the
Flote prairie - the notes precede.

In the afternoon I worked on
Mollusks for lecture, and on notes.

Pack we collected *Dermatan*
in pl. & fr.

Spent evening on Mollusk lesson.

August 3, 1934 - Friday

In the morning Marion and I
drove to the Silver Lake hanging bog.

I collected swamp plants for sections
(see vials) from both parts of the bog.
The farther (E.) part is better, - in
better condition. Few plants were in
flower.

Marion also picked up some *Succinea*
retusa under pieces of wood on the
swampy flat, & also *Lymnaea*
caerulescens, - chiefly in pods.

I wrote to Ella for shells for Zoology
& we drove to Milford with mail.

Later Anderson, Rose and I drove
to Little Spirit Lake. Dry, with great
mud-cracks. Much below. The woods part
was very dry, & Spirit Lake low & foul.
Stopped at Marble Lake (also low) &
Deep Lake was very low. At Temple

Aug. 4, 1934, Saturday.

Spent forenoon on flats & preparing for my talk at the Inn.

At 2 P.M. we drove to the Inn, and at the pavilion I talked to the Ojibwa Protective Association.

A small meeting.

I reminisced & then made 4 points:

- 1 - Keep sewage out of lake.
- 2 - " cattle out of lake.
- 3 - Prevent erosion.
- 4 - Each individual clean up.

Well-received and I was asked to write it up and send to the Secretary, Mr. L. P. Babcock, Point Lake, for distribution.

Sunday, Aug. 5, 1935 - Sunday.

We (Marion, Mrs. Anderson & I) drove to the Methodist Camp ground to hear Bishop Seger preach. (An

elderly, lame man, of the Evangelical Church. Preached on the efficacy of prayer.)

In the afternoon I worked on plan of building for Dr. Wolf. Hot during day, evening cool.

Aug. 6, 1934, Monday.

In the forenoon we drove to Wilford and I had fine chicken-fence screens made for the farm. Anderson hasn't been using them - birds! He also has no anemometer.

^{we drove P.M. to Wilford for the screens, @ 30¢}
after supper we looked at

road, where line merged across our north 40 A., and in the evening we drove to Woodcock's, but he was gone. Later he came to cottage and we had a long conference. He will want evidence for Gull Pond. We also discussed road.

Later I drove to Dr. Smith's with
McKinty, & we conferred on the road.

Aug. 7, 1934 - Tues.

Measured S. part for map with
McKinty.

In afternoon I worked on notes,
plants and mollusks. We drove to
Milford.

In the late afternoon Margie,
The Andersons & I drove to E.
side of Spirit Lake, - in our car.

Aug. 8, 1934. Wednes.

In forenoon I measured for map
with McKinty. West & north.

In afternoon I worked on plants and
on mollusk lesson. Also
in the evening.

Aug. 9, 1934. Thursday

In forenoon I worked mostly on mollusk
lesson. Towards noon Mr. Giltner
& Des Moines & Mr. Alexander, collectors
on Des Moines beach, came to
consult about pollution
of the lake. They had been
induced to do so by the newspaper
account of my talk at the Inn.
I gave them the substance
of it, & they want copy.

Spent afternoon in improving
key (largely from memory) to
the genera of the Mollusks
of the Obolovji region.

Rained at night.

Has been cooler,

Friday, Aug. 10, 1934

Spent forenoon in lab. with
mollusk people. Lectured, & then
used key for genera.

In the afternoon we went to the field.
It had rained some, & this helped.
We worked in woods at Jumping House &
at Beech's spring (found *Pipidini* certain
most common of *R. elm*, and some on
green ash & few on *Parrot*).

We then went to the sand spit
& collected living *Ammonia* *avara*
& *S. retusa* on wet beach (somewhat
muddy) & also picked up drifted
shells. Altogether we found
23 species. Mr. Taylor, Mr. Wells,
Miss Hansen, Miss Jensen and Miss Kerkhoff
went out with me.

After supper Dr. Jagers & I went
to the Lookout and I observed
the following:

Upper part of Lookout

- Helianthus scaberrimus* ^{large} *var. purpureus*
Eryngium yuccifolium *fr. few*
Amorpha canescens *fr. com.*
Monticola arbutifolia *fr. frequent, scab.*
Rosa *fr. frequent, scab.*
Scutellaria *var. lutea* *fr. com.*
Ostrya virginica *fr. scab. fl.*
" *purpurea* *scab. fl.*
Aster laevis *fr. com.*
Solidago rigida *fr. com. fl.*
" *ramulosa* *fr. scab. clump*
Andropogon furcatus *fl. few*
Cirsium palmatum *fl. fl. (few) frequent*
Erigeron annuus *fl. fl. (few) on top*
Helianthus scaberrimus *fl. few*
allium stellatum *fl. few, scab.*
Sorghastrum nutans *fl. 1*
Kuhnia var. corymbosa *fr. fl. few*
Lepachys pinnata *fl. few*
20. *Canotia* *var. sp. few*
Agropyron Richardsonii *fr. scab.*
Bromus pallidus *fr. few*
Stipa spartea *fr. frequent, scab.*
Solidago nemoralis *fr. fl. scab.*
Astragalus canadensis *fr. few*
Elymus canadensis *fl. few*
Erigeron annuus *fl. few*
Aster multiflorus *fr. scab.*
Parthenium stramonium *fr. fl. few*
30. *Cirsium rostratum* *fl. few*
Lathyrus venosus *fr. few*
Aster sericeus *fr. few, scab.*
Solidago nemoralis *fr. scab. fl.*
Phlox pilularis *fr. 1*

- 36 *Eriogonum ramosum* de fl. few
Lithospermum canum lf.
Anemone cylindrica lf. few
 40 *Comandra* lf.
Rudbeckia hirta - also dry sev. stat.
Aster ptarmicoides fl. 1
Andropogon scoparius bud, fl. few
Artemisia ludoviciana bud
Lactuca ludoviciana br. 3

Lower down, - eastward:

- Andropogon furcatus* fl. com
Silphium laciniatum fl. few
Solidago canadensis tw. clump.
Tragopogon — br.
Verbena stricta fr.
Helianthus grosseserratus lf. com.
Euphorbia maculata lf. 1

Towards evening about 20 Amer.
 people came in, headed by Messrs.
 Dietz and Loomis, - the latter an
 instructor in Cortary.

We were caught in shower on
 the 2nd Lookout. This has been

entirely destroyed. They are
 trying to raise red clover, &
 there is (on an average) about 1 small
 to a square yard.

Spent the evening with the
 Amer. guests in living room of
 large cottage.

Aug. 11, 1934 - Sat.

Murky & raining. The Amer. people
 went out to see our prairie with
 Dr. Anderson. On return, Loomis
 asked him if we rented the
 prairie for pasture!

I worked indoors on plants
 & a new mollusk key in which
 habitat will be less essential.

Miss Hayden came with her
 father, & left in the evening.

Aug. 12, 1934. Sunday.

I had an attack of the intestinal trouble which has been epidemic in this region.

It was wet & blustering, too, and as we have to have dinner early on account of the Ames visitors, we did not go to church.

I worked a little on plants, etc., and slept much of the afternoon.

The Ames people left in the afternoon.

Aug. 13, 1934. Monday

Still blustering a part of the day. I was rather weak, but in the morning I made measurements with McKinstry around the pump house and northward, to the Meyer track. Slept much of afternoon & visited in laboratory in evening.

Margie and I drove to Spring Lake towards evening.

¹⁹³⁴
Aug. 14, Tuesday

At 4 am. a cloud covered about $\frac{1}{2}$ of sky to east, but it thundered in the west, and rained here!

A heavy rain about 7 am. Mr. Van Baur, the superintendent of the hatchery, and Mr. ^{Everett} Heald came over to confer about work to be done. They are quite willing to cooperate. Mr. Heald wants me to show him plants suitable for planting in water & on banks, as at Storm Lake, & we will go Thursday. Cleared up.

Mrs. Frankel, her father (of Rock Island) & her daughter called.

At 2:30 PM. Mr. Geo. Shipley & Sheldon came to confer about

hybridization, & about preparation
of materials for sectioning.
Wants methods in his tolog.

I made barometric altitude measurements
from dock up to 61 ft, & checked first
30 ft. with step measurements. Agreed.

The ladies from near Bluff (Eagle)
Point, brought a lot of plants
for identification, - some last
year's. Will come later with more.

Spent evening in writing notes
and checking mollusk key.

August 15, 1934, Wednesday.

It rained at night and in the
morning, - over 1 in. of water fell.

I tried the new mollusk key
with the class, & spent forenoon in
notes, reading, etc.

Quite wet all forenoon.

In the afternoon I took altitude readings
at cottage & south, & collected Gastroptera
costarica at Beech spring. I found
about 530 on the 3-divided Red Elm,
and about 30 on a double Green ash.
Took a map.

We drove to Milford and to
Spirit Lake. Mr. Rose told me
that I was asked to speak at the
Spirit Lake Protective Ass'n meeting
Friday evening.

Dr. Wolf and the Remley's drove
to Iowa City.

Day cleared up in the afternoon.
Spent early evening in putting
Gastroptera away, and in writing
notes.

Aug. 16, 1934, Thursday.
A bright morning, with a very heavy dew.

I went out with Everett
Speaker & Mr. Rose to
Terrace Park.

We had a long visit with
Bill Woodward, President of the
Board of Conservation, and
talked pollution, etc.

We then looked up some
plants suitable for sand dunes.
There are to be used at Thorpe
Lake & elsewhere. I noted:

Sporobolus cryptandrus } the best.
Artemisia canadensis
Cyperus schweinfurthii
Ammophila arenaria (very good)
Potentilla fruticosa

also various prairie plants coming in

In the afternoon we looked for
beach plants around Little Hillers
Bay & its bays.

I collected a few *Chenopodium*
botrys in woods N. of Lab.

Aug. 17, 1934 - Friday.
Made some altitude measurements,
but rained most of the day, as
I was about used up.

At 5:15 Mr. & Mrs. Frick
called for us & took us to
dinner at Temple Park. At
8 PM. I talked to the Spirit
Lake Protective Assn. Com.,
Allen of the Estherville Enterprise
presiding. I emphasized:

Pollution
sewage
cattle
toilets & rubbish
Evaporation
Plant Trees

Later I learned (from Woodcock)
that Furman, the Co. Eng. who
put in our septic tank, etc.
objected to my talk & said
that we (at the Lab.) ought to
clean up first before telling others
what to do, and that he did
not observe the regulations
of the Board of Health when
he put our system in!

(I am taking this up.)

Woodcock gave a straighter
from the shoulder talk on
pollution.

Mrs. Frink brought us back

Aug. 18, 1934 - Saturday
Made some altitude measurements
and rested a part of the day.
Also worked on plats for
Darling & Wallace (& Mrs.
Frankel.) - Just before
noon we saw Woodcock & Way
of the Highway Comm.

Aug. 19, 1934 - Sunday
Spent most of day on
plats and notes on letters
to Wallace, & Mrs. Frankel.
In the evening I conferred with Dr.
Wolf & Dr. Jacques relative to future
work at the Lab., etc.

Aug. 20, 1934 - Mon.
Spent day waiting for
Mr. Way, but wrote letters
(to Wallace, Mrs. Frankel, etc.)
and took some altitude
measurements.

Aug. 21, 1934 Tues.
Took altitude (barometric)
measurements for topographic
map.

after supper Mr. Way of
the Highway Commission & Mr.
Call of Sioux City (his friend) came
up to look at our road.

The engineers are trying to widen
the road to 100 ft., taking 17 ft. off
the Lab. land.

Both are old timers in U. Iowa,
& both were much impressed
with our trying to save some
prairie. I also called attention to
the need of saving the bottle hole.

Mr. Way promised to do all he
could to save it for us, & wants
to keep in touch with me.

Conferred with Dr. Anderson &
Mr. Rose in evening as to future work at Lab.

O. A. Giltner
4006 Grand Ave
Des Moines Ia

Des Moines Beach

Mr. Frink

Mr. Allen

S. P. Baur, Fish-hatchery,
Orleans, Iowa

Everett Specker (Orleans) home in
Arnold's Park, Ia

Aphanogomodon

Grapes at Lake.

+ clear strip all around
Lab.

Transplant ash trees

Lawn in front

Clear around flag.

5. cottages now to path
+ then 10 ft. strip around

at girls dormitory - + clear
N. side + triangle to path

Back Home - to row S. +

10 ft. W. +

Small cottages 8 ft

Grape vines out



West garage Lake fence + grapes out

Leave out old toilet

10 ft. strip

Don McGollen^{??}

Wisconsin alpine

